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INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

S-E-C-R-E-T

PROCESSING COPY 25X1

COUNTRY USSR (RSFSR, Ukrainian SSR)

REPORT

SUBJECT 1. The Kalinin Pump Factory in Moscow
2. Description and Sketch of the City of Stalino
3. The Leningrad Construction Engineering Institute

DATE DISTR. 28 March 1958

NO. PAGES 1

REFERENCES

25X1

DATE OF INFO.

PLACE & DATE ACQ

ENCLOSURE ATTACHED
PLEASE ROUTE

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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

A report on the Kalinin Pump Factory in Moscow, the city of Stalino, and the Leningrad Construction Engineering Institute

Attachments:

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1. A four-page report on the Kalinin Centrifugal Pump Factory in Moscow, containing a description of the plant layout, function, and procedure, with very little detail on the product.

2. A two-page report on the city of Stalino, Ukrainian SSR, containing a brief description of the city accompanied by a sketch of the city and a legend identifying 20 locations.

3. A three-page report on the Leningrad Construction Engineering Institute, containing information on the organization, curriculum, and some of the personalities of the Institute.

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ATTACHMENT #1 to

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The factory was located in Moscow on SELIAMKA No. 13, Oblast of MOSCOW - RAYON KIROVSKI, a well-known factory in existence before the Revolution, then known under its founder's name [redacted] It was under the jurisdiction of the Ministry of Machine Construction. 25X1 25X1

Installations:

Two large, brick two-story buildings, each approximately 200 x 50 meters laid out as follows:

First Building: The first floor contained the standard-parts shop, a warehouse and the pump-assembly shop.

On the second floor were the following shops: a foundry and three machine shops which produced small medium and large size parts for the centrifugal pumps.

Second Building: First floor - On the first floor were the casting models warehouse, the shipping stock warehouse and packing sections, the factory dining room and the factory electric shop.

Second floor - The carpentry shop was on the second floor.

Third Building: This was the foundry and was considered a separate building, although it was connected with the other two buildings mentioned above.

Fourth Building: This was a two-story brick building 100 x 40 meters, about 100 meters from the above-mentioned buildings used as a center for recreational, cultural, union, and political activities. It contained the following:

First floor - Consisted of an auditorium and entrance hall. The auditorium was used for plays, meetings and speeches.

Second floor:- Contained six rooms used for the following activities: sports, recreation, KOMSOMOL, Union and party functions, editorial office for the factory's newspaper (called "KALININESH"), and a library with technical and cultural books.

Fifth Building: At the factory entrance there was another three-story building where the administrative offices were located. The building was laid out in the following manner:

First floor - On the first floor were the Records and Cashier Section, the office of the Chief of Records with his assistants and the office of the Personnel Manager.

Second floor - Offices of the Factory Director and the Factory Manager.

Third floor - Technical section, Bookkeeping Office, Personnel Office and the Office of the Chief of Technical Control.

Several wooden buildings located in the front of the shop buildings described above, were used for storing pump and electrical parts. Pump parts were received from other unidentified factories.

The following were the factory shops or sections and their respective functions:

Foundry - Consisted of two 2-ton furnaces which made iron castings of pump parts of various sizes assembled in other shops in accordance with the master factory plan. The iron was submitted to a temperature of 1,200 degrees. This was regulated by an apparatus called a "BRENEL" through which an almost optimum degree of casting was obtained.

Standard Small-Parts Machine Shop - Contained the following machinery: a small forge, about 10 lathes, a milling machine and a cutter. This shop made standard type screws, nuts, washers and all the necessary standard parts for the pumps.

Small-Parts Machine Shop - The majority of the 17 lathes in this shop were "horizontal", two or three were turret-type. Other machines were a rectifier for Soviet make axles, two radial and one conventional drills, a "Seping" planer and one small, old, boring mill There were two small-size Soviet make milling machines (one horizontal and one vertical), and a small power press for making bearings and other parts. This shop made parts for the small size pumps.

The Middle-Size Parts Shop - This shop contained about 15 lathes (turret and parallel) of Soviet make, and two milling machines (one vertical, one horizontal) of Soviet make from the Krasni Proletari factory, two planers (one vertical, the other a horizontal "Seping", two Soviet radial drills, a small drill of foreign make a boring mill which was used for fitting the two parts of the pump housing. There was a drilling machine which made a part (a sort of hey) which was placed in the parts to affix them to the axle and keep it from rotating. This shop made the upper and lower pump housings, axles, impellors, caps, axle-linings, ball bearing casings, couplings, stuffing boxes, valve clamps and stuffing nuts.

The Large-Size Parts Shop - There were ten lathes, three vertical lathes and seven from the Soviet "Krasni Proletari" factory. The two milling machines, (one vertical and one horizontal) were of Soviet make. Two big planers There was a small "Seping" planer. There were two radial Soviet-make drills, a small drill and an axle grinder. This shop made the large size parts for the centrifugal pumps.

Transportation Section:

The factory had available for transportation six 1½-ton Zis trucks plus three extra trailers used in hauling iron to the foundry. On the 20th of each month, the Zis trucks transported about 500 pumps from the factory to the railroad station in accordance with the Ministry of Machine Construction plan. The pumps were hauled from shop to shop within the factory by five or six mechanically worked "Autocars". Women workers known as (Raspredielitiel) collected and distributed the parts.

Warehouses:

Warehouse for wooden models - The wooden models made at the carpentry shop were kept here and delivered to the foundry when needed.

General warehouse - The pumps were stored here until they were shipped out of the factory. Electric motors for some of the pumps which were received on orders from the Ministry of Electricity were also stored here.

Purchasing Department - purchased the necessary supply of materials and parts.

Electric Motors for Pumps:

Electric motors for pumps came from an unidentified factory. These motors were fitted in the pumps in the machine shops. The kilowatt power varied according to the size of the pumps - - the largest motor had about a 20 kw. potentiality.

Carpentry Shop:

Made the wood models of parts cast in the foundry and the boxes in which the pumps were packed for shipping.

Assembly and Packing Shop:

This shop was connected physically with the machine shop. The centrifugal pumps were assembled here, metal trade-mark plates bearing the name of the "Kalinin" factory were attached, and the pumps were sent to the warehouse for packing in the above-mentioned wooden boxes.

Power used in the plant:

Electric power, regulated by a transformer, was used exclusively for the automatic operation of the factory. The electrical installations were serviced by the electrical shop. The fuel used in the factory was coke from the mines in the Moscow region. The number of deliveries and quantities received was unknown. Its quality was excellent and there was always a reserve.

Water Supply:

The water supply came from the regular city supply.

Production:

The factory produced monthly about 500 centrifugal pumps of various sizes. The pumps weighed from 50 to 500 kilos.

Factory Management's Function: The administrations function was to prepare the operational plans for production, suggestions for increasing and bettering production, control of technological processes and general advice. In the quality control section the parts were checked and the results analyzed.

Production:
Interchange of Factory Methods Plan:
As a rule more pumps were produced than estimated in the annual production schedule due to good organization, better pay for the workers, and political propaganda. A big factor in the increase of production was the Interchange of Factory Methods Plan, established by the Ministry of Machine Construction a few years ago, whose activities have been intensified recently. This plan provided for an interchange among the various factories of ideas and programs for study: (Plans could also be initiated by a factory itself and these projects had to be submitted to the Ministry every three months.)

[redacted] deliver a Factory-Methods Plan and observe the KRASNI-EXCAVATOR factory which made excavating machinery. [redacted] invention of a lathe operator named SIMINSKI. This invention increased the work output of the parallel lathes 400%. It was a copy machine and the cutting knives for the metal worked mechanically. SIMINSKI's book [redacted] 25X1 called "My Working Experiences" included this invention as well as others. The plans for the invention were sent to the KALININ factory [redacted]

Factory Security - An engineer was in charge of the Technical Security Service. This man, personally and frequently inspected all factory installations, the machinery and personnel activities. He took care of anything that was out of order. The replacement parts for machines, especially the lathes were sent from the KRASNI PROLETARI. [redacted] 25X1

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Guards were posted at both factory entrances and another guarded the inside of the Factory. They were not factory-hired guards 25X1
They wore blue pants and jackets, no badges or hats, 25X1
and were armed with a revolver or pistol. These men guarded and controlled the comings and goings of the workers. Admittance to the factory was prohibited to all persons not properly authorized. All personnel used one entrance and had to present their factory card. The motor vehicles used the other 25X1
entrance. There was a permanent group of firemen made up of a representative of each shop. these firemen were chosen 25X1
they were the choice of the head of the Technical Security Service. This group had only small fire extinguishers to work with, so their job was to control the fire until the regular fire department could get there.

The Factory Newspaper:

The "KALININESH" Newspaper - a one page edition which came out once a week. The Chief Editor, who chose the articles to be published, was Russian. His assistant was a reporter who interviewed and took pictures within the factory. The Communist Party Line was put in all the articles, especially those dealing with labor and social topics. It was printed outside the factory, possibly used the presses of a Communist Youth newspaper.

Personnel and Working Conditions:

The factory employed a total of 3,000 persons including its technical, administrative and labor forces. The personnel department made time-motion studies of the respective jobs and dealt with wage problems. There was a five-and-a-half day work week with three shifts - an eight hour morning shift and a 7-hour afternoon and night shift. There was a one-hour lunch period for the morning shift and a fifteen minute break for the afternoon and night shifts. Workers could take their vacations at any time of year and they received from 12 to 24 days depending on their rank and the type of work they did.

An engineer by the name of RUVANOV, a Soviet Communist Party member was director of the factory.

The Chief Engineer KOLIVANOV of the factory and the Head Engineer of the Technical Section VALINSKI were also Communist Party members. STIEPANOV was Personnel Manager and the Partog (Party Secretary) was SHOLOS. The union representative or Proforg was a woman called GROMOVA. The Casting Engineer, Jose Gomez, was a Spaniard. The Chief of the Technical Control Section was ANTONOV, The Chief of Production was a Jewish Engineer called 25X1
BEVMA.

In the Technological Section there were about 25X1
ten people including the Chief Engineer and his engineering and technical assistants of both sexes. There were four or five Economic Experts in the Control and Administrative Departments.

Difficulties:

Once in a while there wasn't enough raw material on hand, which meant that a job could not be finished on schedule. Generally, however, the work output was ahead of the Production Schedule.

Production Estimates:

The factory plans for the future showed a constant increase in production. The present five-year plan showed a 15% increase in production over the previous plan estimate.

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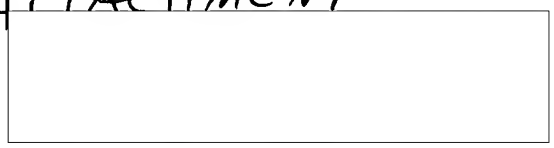

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1. General Description

Stalino (СТАЛИНО), formerly known as [redacted] YUVOVKA (ЮВОВКА [redacted] was the largest city in the Stalino Oblast and was located in the geographical coordinates (4800N - 3748E). It was 200 kilometers from Slavyansk (СЛАВЯНСК), (4852N - 3736E), 160 kilometers from ZHDANOV (ЖДАНОВ) (4705N - 3733E); and approximately 450 kilometers from KHAR'KOV (ХАРЬКОВ).

Stalino was spread out over a large area. There was very little vegetation and the only body of water nearby was located in the northeastern part of the city. A small river called Kalmchus (КАЛЬМЧУС) (see sketch on page 4) emanated from this lake, but was dry most of the summer months. The winters were very severe and lasted from November through March. Spring from April through May; Summer from June through August and Autumn from September through October. There was very little rainfall, but there was much snow in winter and the temperature ranged during the year from a low of 30º - 35º below zero to a high of 30º - 35º above zero. Strong winds and heavy storms were unknown in Stalino.

[redacted] the population of Stalino (Editor's Note) Shabad estimated 500,000 in 1948) to be approximately 200,000, [redacted] 25X1 25X1

[redacted] The principal occupation was coal mining, 25X1 for which the Stalino area was noted. The industrial section of the city was located in the eastern part of the city and residential areas in the west and south, with new residential area along the ARMEMASKAYA Ulitsa (АРМЕМАСКАЯ УЛИЦА) (See sketch on page 4 for location of public buildings, railroad station, street car, bus lines, streets, parks and other points of interest).

 [redacted] 25X1

ECONOMIC and SOCIOLOGICAL ASPECTS

All types of merchandise and clothing of good quality were available in Stalino and food was always plentiful. However, fresh vegetables and fruit were scarce and a black market for farm products flourished. Prices ranged from 5 to 10% above the price set by the government. Prices on all merchandise decreased approximately 5% in 1953 and 1954, but in 1956 they were up to where they were previously and appeared to be exceeding the normal prices.

Stalino was not a cultural city and lacked educational institutions. The only school of importance was the School of Mines (Russian name unknown) located on Armemaskaya Ulitsa. [redacted] 25X1

[redacted] The city boasted of only one daily local newspaper, the Sots Donbass (СОЦ ДОНБАСС). There was only one small church in Stalino and very few practised any religion. People appeared to be content with the government and there were never any manifestations against the government.

There was one large sanitarium and hospital located on the highway to Slavyansk and a clinic located on Armemaskaya Ulitsa.

[redacted] 25X1

LEGEND TO SKETCH OF CITY OF STALINO

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1. Main Railroad Station.
2. City Airport (18 to 20 k from City).
3. Market Place.
4. New Residential Area (Apartment houses).
5. Market Place.
6. Theater
7. Government Building (MVD etc).
8. Poliklinka.
9. Post Office, telegram and telegraph Office.
10. City Park .
11. Stadium.
12. School of Mining
13. Construction Firm (ЮЖСВОДОСТРОЙ)
14. Stalin Metallurgy Plant.
15. Industrial Section of City.
16. Old Coal mine.
17. Main City Square.
18. [redacted]
19. Lake.
20. City Sanitorium or Hospital.

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CITY SKETCH OF STALINO

No scale

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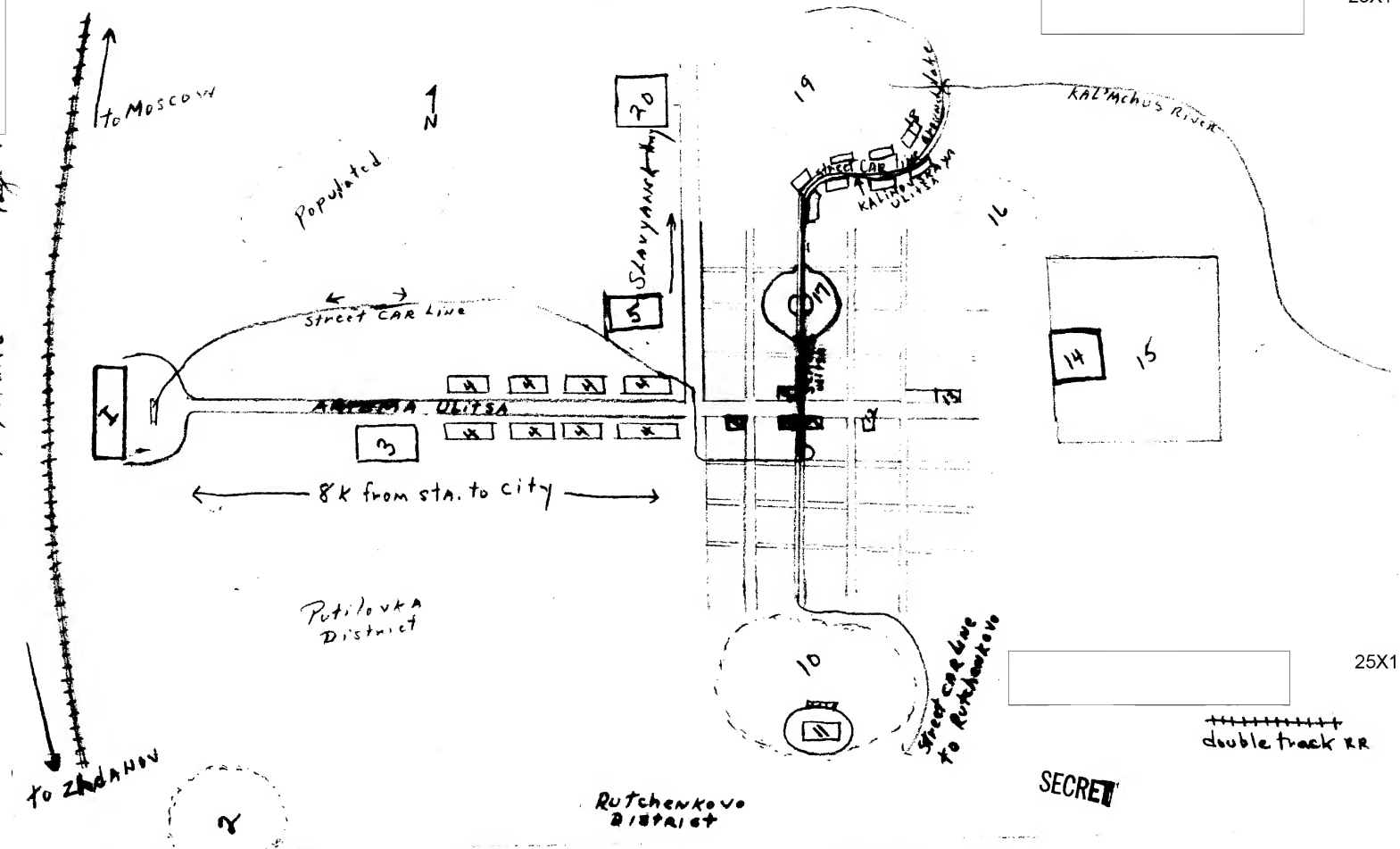

ATTACHMENT #3 to

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1. GENERAL

The Leningrad Engineering Construction Institute (ЛЕНИНГРАДСКИЙ ИНЖЕНЕРНО-СТРОИТЕЛЬНЫЙ ИНСТИТУТ)

Leningradskiy Inzhenerno-Stroitel'nyy Institut) [redacted] 25X1

[redacted] was located on EGOROVA ULITSA 25X1

(ЕГОРОВА УЛИЦА), Leningrad, and had a student body of approximately

1500 students. [redacted] 25X1

[redacted] The school was divided into the following departments or faculties:

Architecture

Civil Engineering

Civil Construction

Industrial Sanitation (water supply, heating, ventilation)

The school year which began in September and ended in late May, was divided into two semesters. Semester examinations were administered in January and May with a two week vacation in January. Classes were held six days weekly, and class subjects were of two-hour duration with a ten minute break between hours. A stipend of 200 to 500 rubles monthly was provided for every student. Generally the foreign student [redacted] 25X1

[redacted] was paid 500 rubles monthly and this did not vary from year 25X1

to year. School dormitories were provided and the student was assessed 10 rubles monthly for his room. The school did not operate on a "shift basis", but late afternoon classes were offered for those employed during the daytime.

2. CURRICULUM

Every student enrolled in the engineering school followed the same curriculum for the first three years. Courses for the next two years of the five year course, were assigned on the basis of the students' specialization. [redacted] 25X1

[redacted]

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The following curriculum was offered the first three years:

First Year

Mathematics	Chemistry
Physics	Geodesy
Descriptive Geometry	Physical Culture
Artistic Design	Basis of Marxism
Lineal Design	

Second Year

Mathematics	Material Resistance
Physics	Statics
Geodesy	Reinforced Cement
Hydraulics	Wood Construction
Communication Systems	Metal Construction
Physical Culture	Basis of Marxism

Third Year

Mathematics	Road Construction
Bridges	Construction materials
Material Resistance	Hydraulics
Thermodynamics	Statics
Automobile Mechanics	Construction Machines
Construction techniques	Welding
Metallurgy	Physical Culture

The professor did not assign any homework, but each subject required more than an hour of home study. The amount of home study was left to the individual to determine.

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There were no Vyssheye Uchebnoye Zavedenije (VUZ) or specialities offered in the Soviet Union

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3. VUZ EVALUATION

In general, [redacted] students considered themselves adequately prepared for VUZ training when they applied for entry in the engineering school. They evaluated their VUZ education as not tough and the curriculum offered sufficient specialization but not too much. It also offered technical and practical training. The material equipment of VUZ was considered adequate, and the instructors were well informed in their subjects. They were good teachers, substantially well qualified and able to get their points across to the students. [redacted]

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[redacted] A sound approach to unfamiliar problems was always encouraged by VUZ courses to a high degree. [redacted]

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[redacted]

4. SCHOOL PERSONALITIES

[redacted] the surnames of the following professors in the engineering school:

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BALYAN (БАЛЯН) - Professor of Thermodynamics

RYNDIN (РЫНДИН)- Professor of Descriptive Geometry

OSTANKIN (ОСТАНКИН) - Professor on Bridge Construction

KOKOVIN (КОКОВИН) - Professor on Highway Construction

BORYSOV (БОРЫСОВ) - Professor on Highway Construction

RAYZER (РАЙЗЕР) - Professor of Geodesy

TORDANOV(ТОРДАНОВ) - Professor of Statics

GORODTSOV(ГОРОДЦОВ) - Professor on Tunnel Construction

[redacted]

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